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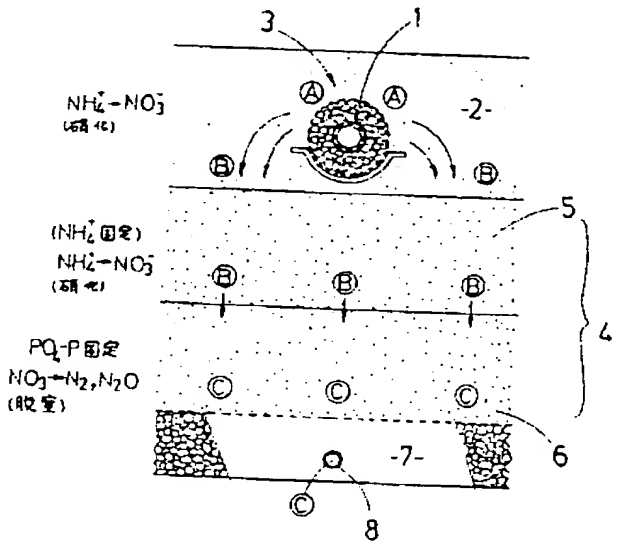
APPLICANT : KANATSU GIKEN KOGYO KK;

INVENTOR : KOMURA SHUICHI;

INT.CL. : C02F 3/00 C02F 3/06 C02F 3/28 C02F 3/34

TITLE : METHOD AND DEVICE FOR PURIFYING SEWAGE



ABSTRACT : PURPOSE: To improve the activity of denitrifying bacteria and to enhance the denitrifying capacity by supplying sewage to the bed of the soil mixed with metallic iron and a filler to consume the oxygen in the sewage, and maintaining the bed in an anaerobic atmosphere.

CONSTITUTION: The SS, BOD, COD, etc., of the sewage A from a sewage sprinkler pipe 1 is aerobically decomposed in the coating soil bed 2 by the digesting and decomposing action of the soil organisms and the adsorbing and filtering action of soil to obtain treated water B. The treated water B is then infiltrated into the anaerobic and water-permeable soil 6, and brought into contact with the iron particles as a reducing agent in the soil. As a result, a large amt. of oxygen in the treated water B and the soil 6 is consumed, and the activity of the denitrifying bacteria is improved. Consequently, the NO_2 and NO_3-N in the treated water B are converted to N_2 and N_2O by the denitrifying bacteria while infiltrating down the soil 6, and efficiently denitrified. By this method, purified water C with the org. matter and nitrogen contents remarkably reduced is obtained.

XP-002073538

1/1 - (C) WPI / DERWENT
AN - 90-182465 ç24!
AP - JP880270359 881026
PR - JP880270359 881026
TI - Waste water purifier system - using soil or filler mixed with iron metal
IW - WASTE WATER PURIFICATION SYSTEM SOIL FILL MIX IRON METAL
PA - (KANA-N) KANATSU GIKEN KOGYO
PN - JP2119992 A 900508 DW9024 000pp
ORD - 1990-05-08
IC - C02F3/00
FS - CPI
DC - D15
AB - J02119992 System uses soil or filler mixed with iron metal and nitrifies effectively due to increased activity of denitrification bacteria, with the soil or filler being kept in an anaerobic condition by the consumption of oxygen included in the waste water.
- ADVANTAGE - Inexpensive and large capacity. (8pp Dwg.No.0/4)